

## CLAIMS:

1. A decoding apparatus for decoding a data stream comprising a plurality of data blocks, said apparatus comprising:
  - a. size determination means (102) for processing a subset of the information of said data stream in order to determine the length of a first data block to be decoded;
  - 5 b. separation means (104) for separating said first data block from said data stream based on said determined length; and
  - c. parallel processing means (20) for processing a subsequent second data block while said first data block is decoded.
- 10 2. Apparatus according to claim 1, wherein said size determination means (102) is adapted to generate a size information and to supply said size information (f\_sz\_of\_blk) to said separation means (104).
3. Apparatus according claim 2, wherein said size information is used by said  
15 separation means (104) to separate said first data block from said data stream.
4. Apparatus according to any one of the preceding claims, wherein said processing of said size determination means (102) is an accumulation processing for accumulating a determined bit number of predetermined portions of said first data block.  
20
5. Apparatus according to claim 4, wherein said plurality of data blocks are audio blocks of a media application frame, and said predetermined portions are mantissa portions.
6. Apparatus according to claim 4 or 5, wherein said determined number of bits  
25 is obtained from a bit allocation processing.
7. Apparatus according to any one of claims 4 to 6, wherein said bit allocation processing is based on at least one psychoacoustic model, wherein power spectral densities are compared with masking curves in order to reveal said bit number.

8. Apparatus according to any one of claims 5 to 7, wherein said parallel processing means (20) are arranged to parse bit stream information of a first frame of said data stream and then to jump to the start of a subsequent second frame, without waiting for  
5 the end of parsing of a side information of audio blocks provided in said first frame.

9. Apparatus according to any one of claims 8, wherein said separation means (104) are arranged to unpack said side information of a first audio block, then parse and send an exponent information to a first processing unit of said parallel processing means (20), a bit  
10 allocation information to a second processing unit of said parallel processing means (20), and a mantissa block to a third processing unit of said parallel processing means (20), and then jump to a second audio block.

10. A method of decoding a data stream comprising a plurality of data blocks, said  
15 method comprising the steps of:

- processing a subset of the information of said data stream in order to determine the length of a first data block to be decoded;
- separating said first data block from said data stream based on said determined length; and
- 20 - processing a subsequent second data block while said first data block is decoded.